

## **FACE INVESTIGATION**

**SUBJECT: Farmer Dies of Fall From Hay Wagon**

### **SUMMARY:**

A 77-year-old white male farmer (the victim) died as the result of a fall from a hay wagon. Although he had discontinued dairy farming about two months before the incident, he continued to help his family with other farm chores. His mobility was limited by joint pain and stiffness, but he did not use assistive devices to walk. On the day of the incident, the victim and his adult grandson were picking up rectangular hay bales from the field. The grandson drove a tractor, pulling a bale loader in front of a hay wagon, while the victim stood on the empty wagon. The portable bale loader picked bales from the field and raised them on a conveyor to the wagon, which was not equipped with siderails. The farmer was positioned near the front of the wagon, prepared to receive and stack bales as they were discharged from the top of the bale loader. Although the event was unwitnessed, it appears the victim lost his balance and fell from the wagon, striking the back of his neck on the bale loader as he fell. The grandson saw the victim on the ground, began CPR, then called for help. The victim was taken to the hospital where he was admitted and died two days later of complications of fractured cervical vertebrae. The Wisconsin FACE investigator concluded that, to prevent similar occurrences, farmers should:

- ! consider the physical capacities of individual farm workers and assign light or limited duty jobs when necessary due to a worker's injury or illness**
- ! include safety management as an integral part of their business operation**

### **INTRODUCTION:**

On July 4, 1995, a 77-year-old farmer died after falling from a hay wagon and striking his head on a bale loader. The Wisconsin FACE field investigator learned of the incident on August 23, 1995, from the death certificate. The investigation was initiated on August 24, 1995, with an interview with the coroner, and followed up with a site visit, limited family interviews, and a report from the state climatologist.

The victim had been raised on a dairy farm, and was involved in farming activities since he was about seven years old. He learned farming through on-the-job training, while operating a dairy farm for more than 50 years with the assistance of family members. About two months before the incident, the victim sold his dairy herd in preparation for retirement from farming activities, but he continued to work daily on field activities. Although his mobility was limited by joint pain and stiffness, he did not use assistive devices to walk or climb onto equipment. There was no written safety program for the farm operation.

### **INVESTIGATION:**

On the day of the incident, the farmer ate breakfast with his wife and left the house about 9:00 A.M. to begin work with his grandson. The high temperature of the day was 76°F at 5:00 P.M., with no precipitation. The farmer's morning activities are unknown but around 1 P.M., the farmer and his grandson were using a bale loader and hay wagon to pick up rectangular hay bales from the field. The grandson drove a tractor attached to the bale loader in front of the wagon. The victim was standing on the empty hay wagon preparing to stack bales as they were discharged from the top of the bale loader. The hay wagon floor had a smooth, intact surface, approximately

4 feet from the ground, and was not equipped with side rails. Although the event was unwitnessed, it appears the victim lost his balance and fell from the wagon to the ground, striking the back of his neck on the bale loader as he fell. The grandson began CPR, then called for help. The victim was taken to the hospital where he was admitted and died two days later.

**CAUSE OF DEATH:** The death certificate and coroner's report listed cause of death as cardiac dysrhythmia due to fracture of C-1 and C-2 vertebrae with spinal cord injury.

## **RECOMMENDATIONS/DISCUSSION**

**Recommendation #1:**            **Farmers and their family members should consider the physical capacities of individual farm workers and assign light or limited duty jobs when necessary due to a worker's injury or illness.**

Discussion:        Farm family members should assume responsibility of maintaining a safe workplace for themselves and others who work or visit the farmstead. This may involve restricting the work activities of family members and other farm workers who have physical limitations caused by illness or injury. The farmer in this incident had limited mobility in his legs due to joint pain and stiffness, which may have affected his balance and reflexes on the unstable surface of the haywagon. Although the farmer was experienced in the tasks of loading the hay wagon from the bale loader, he was unable to perform them safely with his limited mobility.

**Recommendation #2:**            **Farmers should include safety management as an integral part of their business operation.**

Discussion:        Components of an effective safety management system include a written safety program, hazard analysis and control, training programs and safety committees. Each of these components should be developed to meet the specific needs of individual farms, and be incorporated into the farmers' business operating plan. The financial cost of implementing the program may be considered expensive, but the business investment would prevent many farm fatalities. In this case, the fall would have been prevented by the substitution of a bale loading system that did not require a worker to remain on the wagon (e.g. a bale thrower or an automatic bale wagon). Although the practice of riding on a slow-moving hay wagon without the fall protection of side rails may be regarded as acceptable on small family farms, the hazard of falling from the wagon is present and should be avoided.

## **REFERENCES**

Safety Management on the Farm, Mark A. Purschwitz, 1996, Department Bulletin of University of Wisconsin-Madison College of Agricultural and Life Sciences, Madison, WI